

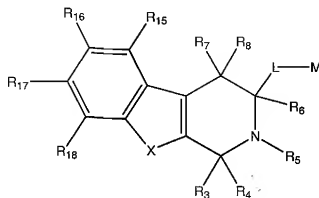
AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing Of Claims

1-9. (Cancelled)

10. (Currently amended). A compound comprising the formula:



wherein

R₃ and R₄ are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, and a thiocarbonyl group, or where R₃ and R₄ are taken together to form a ring, in each case unsubstituted or further substituted through available valencies;

R₅ and R₆ are each independently selected from a group of substituents comprising a moiety attached to the ring nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, cyano, a carbonyl group, a thiocarbonyl group and a sulfonyl group, or where R₅ and R₆ are taken together to form a 3, 4, 5, 6, 7 or 8 membered ring, in each case unsubstituted or further substituted through available valencies;

R₇ and R₈ are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, or where R₇ and R₈ are taken together to form a substituent comprising a moiety attached to the ring carbon selected from the group consisting of a carbonyl, thiocarbonyl, imine, alkene and ring, or where R₆ and R₇ are taken together to form a 3, 4, 5, 6, 7 or 8 membered ring, in each case unsubstituted or further substituted through available valencies;

R₁₅, R₁₆, R₁₇ and R₁₈ are each independently selected from a group of substituents comprising a moiety attached to the ring carbon selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxaalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, sulfonylamino, nitro, cyano, halogen, hydroxyl, thiol, amino, a carbonyl group, and a thiocarbonyl group, except where R₁₅ and R₁₆, R₁₆ and R₁₇, and/or R₁₇ and R₁₈ are taken together to form a 3, 4, 5, 6, 7 or 8 membered ring, in each case unsubstituted or further substituted through available valencies;

X is selected from the group consisting of O, S, and NR₁₄, where R₁₄ comprises a moiety attached to the nitrogen selected from the group consisting of hydrogen, hydroxyl, alkyl, aromatic ring, alkoxy, aryloxy, a carbonyl group, a thiocarbonyl group, and a sulfonyl group, in each case unsubstituted or further substituted through available valencies;

M is selected from the group consisting of:



; and

~~L is a substituted or unsubstituted chain of 3-12 atoms connecting the M substituent to the carbon atom alpha to the L substituent.~~ L is a leader group moiety separating the M substituent from the carbon ring atom alpha to L, wherein the number of backbone atoms of the leader group moiety separating the M substituent from the carbon ring atom alpha to L is between 3 and 12.

11-15 (Cancelled)

16. (Previously amended). A compound according to claim 10, wherein at least one of R₃ and R₄ is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted C₁-C₁₀ alkyl, aminoalkyl, or oxaalkyl.

17. (Previously amended). A compound according to claim 10, wherein at least one of R₃ and R₄ is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted branched C₁-C₁₀ alkyl, aminoalkyl, or oxaalkyl.

18. (Original). A compound according to claim 17, wherein the C₁-C₁₀ alkyl, aminoalkyl, or oxaalkyl further comprises a substituent selected from the group consisting of an alkyl, aromatic ring, cyano group, halogen, and carbonyl group.

19. (Original). A compound according to claim 17, wherein the C₁-C₁₀ alkyl, aminoalkyl, or oxaalkyl further comprises a substituted or unsubstituted aromatic ring.

20. (Previously amended). A compound according to claim 10, wherein at least one of R₃ and R₄ is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted aromatic ring.

21. (Previously amended). A compound according to claim 10, wherein at least one of R₃ and R₄ is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted phenyl ring.

22. (Previously amended). A compound according to claim 10, wherein at least one of R_3 and R_4 is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted heteroaryl.

23. (Currently amended). A compound according to claim 10, wherein at least one of R_3 and R_4 is selected from a group of substituents where the moiety attached to the ring carbon is a substituted or unsubstituted heteroaryl selected from the group consisting of furan, thiofuran, pyrrole, pyrazole, isoimidazole, triazole, isoxazole, oxazole, thiazole, isothiazole, oxadiazole, oxatriazole, pyridine, pyridazine, pyrimidine, pyrazine, triazine, benzofuran, isobenzofuran, benzothiofuran, isobenzothiofuran, indole, benzodioxolane, isobenzazole, quinoline, isoquinoline, cinnoline, quinazoline, naphthyridine, and pyridopyridine.

24. (Previously amended). A compound according to claim 10, wherein R_3 and R_4 are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring.

25. (Previously amended). A compound according to claim 10, wherein R_3 and R_4 are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 member alicyclic ring.

26. (Previously amended). A compound according to claim 10, wherein at least one of R_3 and R_4 is selected from a group of substituents where the moiety attached to the ring carbon is selected from the group consisting of an aldehyde, amide, ester, ketone, and carboxylic acid, each unsubstituted or further substituted through available valencies.

27. (Previously amended). A compound according to claim 10, wherein R_5 and R_6 are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring.

28. (Currently amended). A compound according to claim 10, wherein R_5 and R_6 are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered alicyclic ring.

29. (Previously amended). A compound according to claim 10, wherein R_6 and R_7 are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring.

30. (Currently amended). A compound according to claim 10, wherein R_6 and R_7 are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered alicyclic ring.

31. (Previously amended). A compound according to claim 10, wherein R_7 and R_8 are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring.

32. (Currently amended). A compound according to claim 10, wherein R_7 and R_8 are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered alicyclic ring.

33. (Previously amended). A compound according to claim 10, wherein R_7 and R_8 are taken together to form an imine having a substituent R_9 on the imine nitrogen selected from the group consisting of hydrogen, alkyl, aminoalkyl, oxalkyl, aromatic ring, alkoxy, aryloxy, alkylamino, arylamino, alkylthio, arylthio, acylamino, and sulfonylamino, each unsubstituted or further substituted through available valencies.

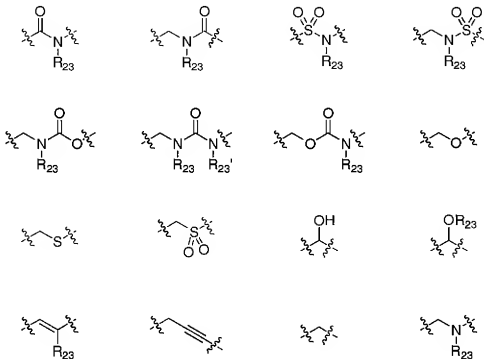
34. (Previously amended). A compound according to claim 10, wherein R_7 and R_8 are taken together to form an alkene substituent having the formula $=CR_{10}R_{11}$ where R_{10} and R_{11} are each independently selected from a group of substituents consisting of hydrogen, alkyl, aryl, alkylamino, arylamino, sulfonylamino, a carbonyl group, thiocarbonyl, and sulfonyl or where R_{10} and R_{11} are taken together to form an alkene, each unsubstituted or further substituted through available valencies.

35. (Previously amended). A compound according to claim 10, wherein R_7 and R_8 are taken together to form an alkene substituent having the formula $=CR_{10}R_{11}$ where R_{10} and R_{11} are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 membered ring, each unsubstituted or further substituted through available valencies.

36. (Currently amended). A compound according to claim 35 wherein R_{10} and R_{11} are taken together to form a substituted or unsubstituted 3, 4, 5, 6, 7 or 8 ~~member~~ membered alicyclic ring.

37 (Cancelled).

38. (Currently amended). A compound according to claim 10, wherein a portion of L that is attached to the carbon ring atom alpha to L comprises a moiety selected from the group consisting of:

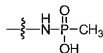


where R_{23} is a C_{1-10} alkyl.

39. (Previously presented). A compound according to claim 10, wherein M is



40. (Previously presented). A compound according to claim 10, wherein M is



41. (Previously presented). A compound according to claim 10, wherein M is



42. (Previously presented). A compound according to claim 10, wherein M is



43. (Previously presented). A compound according to claim 10, wherein M is



44. (Previously presented). A compound according to claim 10, wherein M is



45. (Previously presented). A compound according to claim 10, wherein M is



46. (Previously presented). A compound according to claim 10, wherein M is



47. (Previously presented). A compound according to claim 10, wherein M is



48. (Previously presented). A compound according to claim 10, wherein M is



49. (Currently amended). A compound according to claim 10, wherein ~~L is a substituted or unsubstituted chain of 3-9 atoms connecting the M substituent to the carbon atom alpha to the~~ L substituent the number of backbone atoms of the leader group moiety separating the M substituent from the carbon ring atom alpha to L is between 3 and 9.

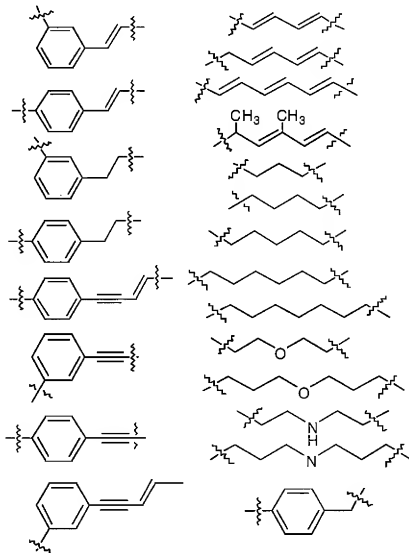
50. (Currently amended). A compound according to claim 10, wherein ~~L is a substituted or unsubstituted chain of 4-8 atoms connecting the M substituent to the carbon atom alpha to the~~ L substituent the number of backbone atoms of the leader group moiety separating the M substituent from the carbon ring atom alpha to L is between 4 and 8.

51. (Cancelled).

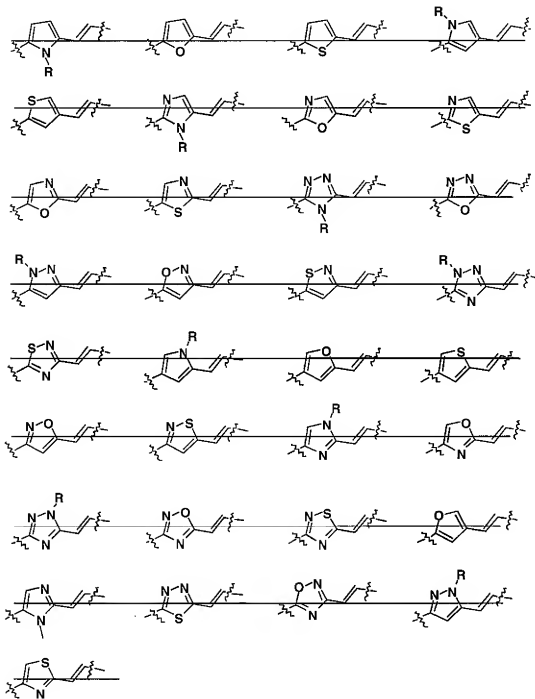
52. (Cancelled).

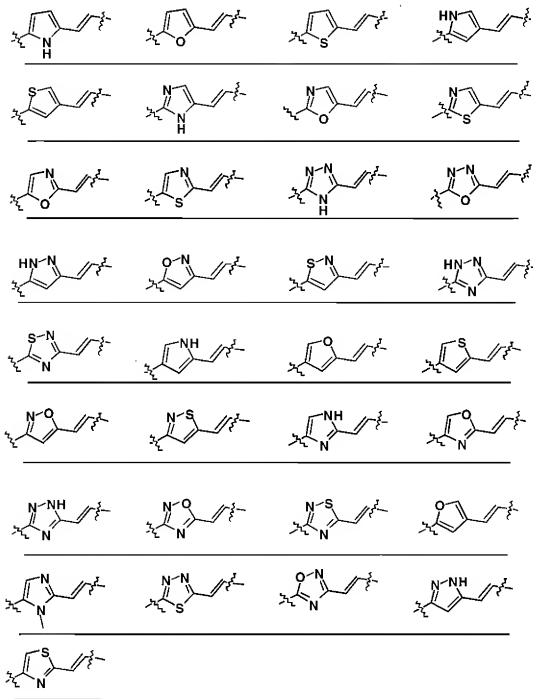
53. (Cancelled).

54. (Presently amended) A compound according to claim 10, wherein ~~L is selected from~~
a portion of the backbone atoms of L are substituted to form a member of the group consisting of

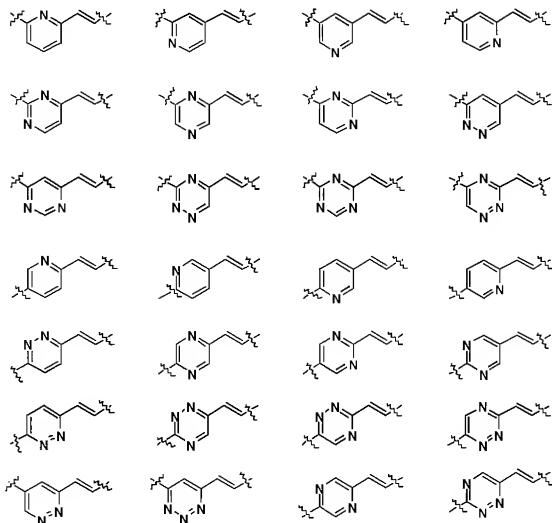


55. (Presently amended) A compound according to claim 10, wherein L is selected from a portion of the backbone atoms of L are substituted to form a member of the group consisting of





56. (Presently amended) A compound according to claim 10, wherein L is selected from a portion of the backbone atoms of L are substituted to form a member of the group consisting of



57. (Currently amended). A compound according to claim 10, wherein ~~one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent~~ two substituents of a same backbone atom or of different backbone atoms of L are taken together to form a three, four, five, six, seven, eight or nine membered ring.

58. (Currently amended). A compound according to claim 10, wherein ~~one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent form a portion of two substituents of a same backbone atom or of different backbone atoms of L are taken together to form~~ a three, four, five, six, seven, eight or nine membered saturated ring.

59. (Currently amended). A compound according to claim 10, wherein ~~one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent form a portion of two substituents of a same backbone atom or of different backbone atoms of L are taken together to form~~ a three, four, five, six, seven, eight or nine membered unsaturated ring.

60. (Currently amended). A compound according to claim 10, wherein ~~one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent form a portion of two substituents of a same backbone atom or of different backbone atoms of L are taken together to form~~ a three, four, five, six, seven, eight or nine membered aromatic ring.

61. (Currently amended) A compound according to claim 10, wherein ~~one or more of the atoms of the L substituent in the chain connecting the M substituent to the carbon atom alpha to the L substituent~~ backbone atoms of L form a portion of a ring selected from the group consisting of cyclopropyl, cyclohexane, cyclopentane, cyclopentene, cyclopentadiene, cyclohexane, cyclohexene, cyclohexadiene, phenyl, cycloheptane, cycloheptene, cycloheptadiene, cyclooctane, cyclooctene, and cyclooctadiene, each substituted or unsubstituted.

62. (Currently amended). A compound according to claim 10, wherein ~~at least a portion of the L substituent comprises~~ one or more backbone atoms of L form a portion of a moiety selected from the group consisting of phenyl, biphenyl-2-yl, 2-bromophenyl, 2-bromocarbonylphenyl, 2-bromo-5-fluorophenyl, 4-*tert*-butylphenyl, 4-carbamoylphenyl, 4-carboxy-2-nitrophenyl, 2-chlorophenyl, 4-chlorophenyl, 3-chlorocarbonylphenyl, 4-chlorocarbonylphenyl, 2-chloro-4-fluorophenyl, 2-chloro-6-fluorophenyl, 4-chloro-2-nitrophenyl, 6-chloro-2-nitrophenyl, 2,6-dibromophenyl, 2,3-dichlorophenyl, 2,5-dichlorophenyl, 3,4-dichlorophenyl, 2-difluoromethoxyphenyl, 3,5-dimethylphenyl, 2-ethoxycarbonylphenyl, 2-fluorophenyl, 2-iodophenyl, 4-isopropylphenyl, 2-methoxyphenyl,

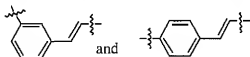
4-methoxyphenyl, 2-methylphenyl, 3-methylphenyl, 4-methylphenyl, 5-methyl-2-nitrophenyl, 4-methylsulfonylphenyl, naphth-2-yl, 2-nitrophenyl, 3-nitrophenyl, 4-nitrophenyl, 2,3,4,5,6-pentafluorophenyl, phenyl, 2-trifluoromethoxyphenyl, 3-trifluoromethoxyphenyl, 4-trifluoromethoxyphenyl, 2-trifluoromethylphenyl, 3-trifluoromethylphenyl, 4-trifluoromethylphenyl, 2-trifluoromethylsulfonylphenyl, and 4-trifluoromethylsulfonylphenyl, each substituted or unsubstituted.

63. (Currently amended). A compound according to claim 10, wherein ~~at least a portion of the L-substituent comprises one or more backbone atoms of L~~ form a portion of a moiety selected from the group consisting of furan, thiofuran, pyrrole, isopyrrole, 3-isopyrrole, pyrazole, isoimidazole, triazole, isoxazole, oxazole, thiazole, isothiazole, oxadiazole, oxatriazole, pyridine, pyridazine, pyrimidine, pyrazine, triazine, benzofuran, isobenzofuran, benzothiofuran, isobenzothiofuran, indole, isobenzazole, quinoline, isoquinoline, cinnoline, quinazoline, naphthyridine, and pyridopyridine, each substituted or unsubstituted.

64. (Currently amended). A compound according to claim 10, wherein ~~at least a portion of the L-substituent comprises one or more backbone atoms of L~~ form a portion of a moiety selected from the group consisting of 4-amino-2-hydroxypyrimidin-5-yl, dibenzofuranyl, benzothiazol-2-yl, 1*H*-benzimidazol-2-yl, 2-bromopyrid-5-yl, 5-bromopyrid-2-yl, 4-carbamoylthiazol-2-yl, 3-carboxypyrid-4-yl, 5-carboxy-2,6-dimethylpyrid-3-yl, 3,5-dimethylisoxazol-4-yl, 5-ethoxy-2,6-dimethylpyrid-3-yl, 5-fluoro-6-hydroxypyrimidin-4-yl, fur-2-yl, fur-3-yl, 5-hydroxy-4,6-dimethylpyrid-3-yl, 8-hydroxy-5,7-dimethylquinolin-2-yl, 5-hydroxymethylisoxazol-3-yl, 3-hydroxy-6-methylpyrid-2-yl, 3-hydroxypyrid-2-yl, 1*H*-imidazol-2-yl, 1*H*-imidazol-4-yl, 1*H*-indol-3-yl, isothiazol-4-yl, isoxazol-4-yl, 2-methylfur-3-yl, 5-methylfur-2-yl, 1-methyl-1*H*-imidazol-2-yl, 5-methyl-3*H*-imidazol-4-yl, 5-methylisoxazol-3-yl, 5-methyl-2*H*-pyrazol-3-yl, 3-methylpyrid-2-yl, 4-methylpyrid-2-yl, 5-methylpyrid-2-yl, 6-methylpyrid-2-yl, 2-methylpyrid-3-yl, 2-methylthiazol-4-yl, 5-nitropyrid-2-yl, 2*H*-pyrazol-3-yl, 3*H*-pyrazol-4-yl, pyridazin-3-yl, pyrid-2-yl, pyrid-3-yl, pyrid-4-yl, 5-pyrid-3-yl-2*H*-[1,2,4]triazol-3-yl, pyrimidin-4-yl, pyrimidin-5-yl, 1*H*-pyrrol-3-yl, quinolin-2-yl, 1*H*-tetrazol-5-yl, thiazol-2-yl, thiazol-5-yl, thien-2-yl, thien-3-yl,

~~2H-[1,2,4]triazol-3-yl, 3H-[1,2,3]triazol-4-yl, 5-trifluoromethylpyrid-2-yl, and the like.
Suitable protecting groups include tert-butoxycarbonyl, benzyloxycarbonyl, benzyl, 4-methoxybenzyl, and 2-nitrobenzyl.~~

65. (Currently amended). A compound according to claim 10, wherein a portion of the L substituent that is attached to M is meta- or para-cinnamate selected from the group consisting of



66. (New). A compound according to claim 57, wherein the three, four, five, six, seven, eight or nine membered ring formed by the substituents of the one or more backbone atoms of L is selected from the group of rings consisting of substituted or unsubstituted aryl, heteroaryl, bicycloaryl and bicycloheteroaryl rings.

67. (New). A compound according to claim 10, wherein a portion of the backbone atoms of L forms a member selected from the group consisting of $-(CH_2)_n-$, where n is an integer from 1 to 10; $-CH(CH_3)-$, $-CH(CH_3)CH_2-$, $-CH_2CH(CH_3)-$, $-CH(CH_3)CH_2CH_2-$, $-CH_2CH(CH_3)CH_2-$, $-CH_2CH_2CH(CH_3)CH_2-$, $-CH_2CH_2CH_2CH(CH_3)-$, $-CH(CH_3)CH_2CH_2CHCH_2-$, $-CH_2CH(CH_3)CH_2CH_2CH_2-$, $-CH_2CH_2CH(CH_3)CH_2CH_2-$, $-CH_2CH_2CH_2CH(CH_3)CH_2-$, $-CH_2CH_2CH_2CH_2CH(CH_3)-$, $-CH(CH_2CH_3)-$, $-CH(CH_2CH_3)CH_2-$, $-CH_2CH(CH_2CH_3)-$, $-CH(CH_2CH_3)CH_2CH_2-$, $-CH_2CH(CH_2CH_3)CH_2-$, $-CH_2CH_2CH(CH_2CH_3)-$, $-CH(CH_2CH_3)CH_2CH_2CH_2-$, $-CH_2CH(CH_2CH_3)CH_2CH_2CH_2-$, $-CH_2CH_2CH(CH_2CH_3)CH_2CH_2-$, $-CH_2CH_2CH_2CH(CH_2CH_3)CH_2-$, $-CH(CH_2CH_3)CH_2CH_2CH_2CH_2-$, $-CH_2CH(CH_2CH_3)CH_2CH_2CH_2-$, $-CH_2CH_2CH_2CHCH(CH_2CH_3)-$, $-CH=CH-$, $-CH=CHCH_2-$, $-CH_2CH=CH-$, $-CH=CHCHCH_2-$, $-CH_2CH=CHCH_2-$, $-CH_2CH_2CH=CH-$, $-CH=CHCH_2CH_2CH_2-$, $-CH_2CH=CHCH_2CH_2-$, $-CH_2CH_2CH=CHCH_2-$, $-CH_2CH_2CH_2CH=CH-$, $-CH=CHCHCH_2CH_2CH_2-$, $-CH_2CH=CHCH_2CH_2CH_2-$, $-CH_2CH_2CH=CHCH_2CH_2-$, $-CH_2CH_2CH_2CH=CHCH_2-$, $-CH_2CH_2CH_2CHCH=CH-$, $-C(CH_3)=CH-$, $-CH=C(CH_3)-$, $-C(CH_3)=CHCH_2-$,

-CH=C(CH₃)CH₂-, -CH=CHCH(CH₃)-, -CH(CH₃)CH=CH-, -CH₂C(CH₃)=CH-,
-CH₂CH=C(CH₃)-, -CH=CHCH=CH-, -CH=CHCH=CHCH₂-, -CH₂CH=CHCH=CH-,
-CH=CHCH₂CH=CH-, -CH=CHCH=CHCH₂CH₂-, -CH=CHCH₂CH=CHCH₂-,
-CH=CHCH₂CH₂CH=CH-, -CH₂CH=CHCH=CHCH₂-, -CH₂CH=CHCH₂CH=CH,
-CH₂CH₂CH=CHCH=CH-, -C(CH₃)=CHCH=CH-, -CH=C(CH₃)CH=CH-,
-CH=CHC(CH₃)=CH-, -CH=CHCH=C(CH₃)-, -C≡C-, -C≡CCH₂-, -CH₂C≡C-, -C≡CCH(CH₃)-,
-CH(CH₃)C≡C-, -C≡CCH₂CH₂-, -CH₂C≡CCH₂-, -CH₂CH₂C≡C-, -C≡CCH(CH₃)CH₂-,
-C≡CCH₂CH(CH₃)-, -CH(CH₃)C≡CCH₂-, -CH₂C≡CCH(CH₃)-, -CH(CH₃)CH₂C≡C-,
-CH₂CH(CH₃)C≡C-, -C≡CCH=CH-, -CH=CHC≡C-, -C≡CC≡C-, -C≡CCH₂CH₂CH₂-,
-CH₂CH₂CH₂C≡C-, -C≡CCH₂CH₂CH₂CH₂-, -CH₂CH₂CH₂CH₂C≡C-, -C≡CCH=CHCH=CH-,
-CH=CHC≡C-CH=CH-, -CH=CHCH=CHC≡C-, -C(CH₃)=CHC≡C-, -CH=C(CH₃)C≡C-,
-C≡CC(CH₃)=CH-, and -C≡CCH=C(CH₃)-